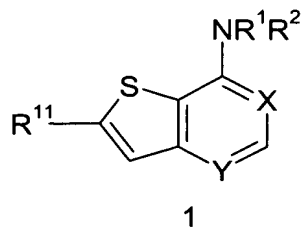


**IN THE CLAIMS**

Please amend claims 1, 13 and 14 as follows (deletions are shown in strikethrough and additions are shown in underline).

1. (Currently Amended) A compound of the formula of formula 1



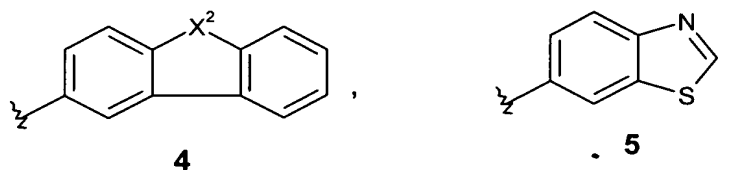
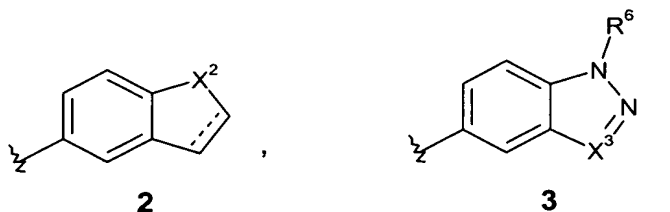
or a pharmaceutically acceptable salt, ~~prodrug~~ or hydrate thereof,

X is CH ;

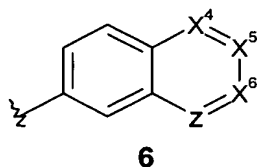
Y is N;

R¹ is H or C₁-C₆ alkyl;

R² is a group of the formula



or



wherein X² is -S-, -N(R⁶)- or O, and X³, X⁴, X⁵, X⁶, and Z is N or CH, the dashed line in formula 2 represents an optional double bond, and the above R² groups of formulas 2, 4 and 6 are

optionally substituted by 1 to 5  $R^5$  substituents and the  $R^2$  groups of formulas 3 and 5 are optionally substituted by 1 to 3  $R^5$  substituents;

each  $R^5$  is independently selected from halo, cyano, trifluoromethoxy, trifluoromethyl,  $-C(O)R^8$ ,  $-NR^6C(O)R^7$ ,  $-C(O)NR^6R^7$ ,  $-NR^6R^7$ ,  $-OR^9$ ,  $-SO_2NR^6R^7$ ,  $-SO_2R^6$ ,  $-NR^6SO_2R^7$ ,  $C_1-C_6$  alkyl,  $C_2-C_6$  alkenyl,  $C_2-C_6$  alkynyl,  $-(CH_2)_jO(CH_2)_qNR^6R^7$ ,  $-(CH_2)_tO(CH_2)_qOR^9$ ,  $-(CH_2)_tOR^9$ ,  $-S(O)_j(C_1-C_6$  alkyl),  $-(CH_2)_t(C_6-C_{10}$  aryl),  $-(CH_2)_t(5$  to 10 membered heterocyclic),  $-(CH_2)_jO(CH_2)_q(5$  to 10 membered heterocyclic),  $-C(O)(CH_2)_t(5$  to 10 membered heterocyclic),  $-(CH_2)_jNR^7(CH_2)_qNR^6R^7$ ,  $-(CH_2)_jNR^7CH_2C(O)NR^6R^7$ ,  $-(CH_2)_jNR^7(CH_2)_qNR^9C(O)R^8$ ,  $-(CH_2)_jNR^7(CH_2)_tO(CH_2)_qOR^9$ ,  $-(CH_2)_jNR^7(CH_2)_qS(O)_j(C_1-C_6$  alkyl),  $-(CH_2)_jNR^7(CH_2)_tR^6$ ,  $-SO_2(CH_2)_t(C_6-C_{10}$  aryl), and  $-SO_2(CH_2)_t(5$  to 10 membered heterocyclic), wherein  $j$  is an integer from 0 to 2,  $t$  is an integer from 0 to 6,  $q$  is an integer from 2 to 6, the  $-(CH_2)_q$ - and  $-(CH_2)_t$ - moieties of the foregoing  $R^5$  groups optionally include a carbon-carbon double or triple bond where  $t$  is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing  $R^5$  groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl,  $-C(O)R^8$ ,  $-NR^6C(O)R^7$ ,  $-C(O)NR^6R^7$ ,  $-(CH_2)_tNR^6R^7$ ,  $-SO_2R^6$ ,  $-SO_2NR^6R^7$ ,  $C_1-C_6$  alkyl,  $-(CH_2)_t(5$  to 10 membered heterocyclic),  $-(CH_2)_tO(CH_2)_qOR^9$ , and  $-(CH_2)_tOR^9$ , wherein  $t$  is an integer from 0 to 6 and  $q$  is an integer from 2 to 6;

each  $R^6$  and  $R^7$  is independently selected from H,  $C_1-C_6$  alkyl,  $-(CH_2)_t(C_6-C_{10}$  aryl),  $-(CH_2)_t(5$  to 10 membered heterocyclic),  $-(CH_2)_tO(CH_2)_qOR^9$ , and  $-(CH_2)_tOR^9$ , wherein  $t$  is an integer from 0 to 6 and  $q$  is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing  $R^6$  and  $R^7$  groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl,  $-C(O)R^8$ ,  $-NR^9C(O)R^{10}$ ,  $-C(O)NR^9R^{10}$ ,  $-NR^9R^{10}$ ,  $C_1-C_6$  alkyl,  $-(CH_2)_t(C_6-C_{10}$  aryl),  $-(CH_2)_t(5$  to 10 membered heterocyclic),  $-(CH_2)_tO(CH_2)_qOR^9$ , and  $-(CH_2)_tOR^9$ , wherein  $t$  is an integer from 0 to 6 and  $q$  is an integer from 2 to 6, with the proviso that where  $R^6$  and  $R^7$  are both attached to the same nitrogen, then  $R^6$  and  $R^7$  are not both bonded to the nitrogen directly through an oxygen;

each  $R^8$  is independently selected from H,  $C_1-C_{10}$  alkyl,  $-(CH_2)_t(C_6-C_{10}$  aryl), and  $-(CH_2)_t(5$  to 10 membered heterocyclic), wherein  $t$  is an integer from 0 to 6;

each  $R^9$  and  $R^{10}$  is independently selected from H and  $C_1-C_6$  alkyl; and

$R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5-C_9$  azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said  $C_5-C_9$  azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5  $R^5$  substituents.

Claims 2-5 (Canceled)

6. (Previously presented) The compound of claim 1, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5-C_9$  azabicyclic, aziridinyl, azetidiny, or pyrrolidinyl ring wherein said  $C_5-C_9$  azabicyclic, aziridinyl, azetidiny, or pyrrolidinyl ring are optionally substituted by 1 to 5  $R^5$  substituents.
7. (Original) The compound of claim 6, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5-C_9$  azabicyclic, azetidiny or pyrrolidinyl ring wherein said  $C_5-C_9$  azabicyclic, azetidiny or pyrrolidinyl ring is optionally substituted by 1 to 5  $R^5$  substituents.
8. (Original) The compound of claim 7, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5-C_9$  azabicyclic ring, wherein said  $C_5-C_9$  azabicyclic ring is optionally substituted by 1 to 5  $R^5$  substituents.
9. (Original) The compound of claim 7, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached to form an azetidiny ring, wherein said azetidiny ring is optionally substituted by 1 to 5  $R^5$  substituents.
10. (Original) The compound of claim 7, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached to form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5  $R^5$  substituents.
11. (Canceled)
12. (Previously presented) The compound of claim 1, wherein said  $R^2$  group is a group of formula 2 or 6, wherein said formulas 2 and 6 are optionally substituted by 1 to 5  $R^5$  substituents.
13. (Currently amended) The compound of claim 1, wherein said compound is selected from the group consisting of:  
Azetidin-1-yl-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-pyrrolidin-1-yl-methanone;

7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid cyclohexyl-methyl-amide;  
(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-(2-morpholin-4-yl-  
ethyl)-amide;  
N-{1-[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-  
acetamide;  
N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-  
acetamide;  
(3-Methylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-  
yl]-methanone;  
(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(2-Hydroxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(3-Ethoxy-azetidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-  
yl}-acetamide;  
cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-  
pyrrolidin-3-yl}-amide; pharmaceutically acceptable salts of said compounds; and solvates of said  
compounds; ~~and prodrugs of said compounds.~~

14. (Currently amended) The compound of claim 13, wherein said compound is selected from the group consisting of

(2S)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(+/-)-N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

(3S)-(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(+/-)-N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

(2R)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3S)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3R)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

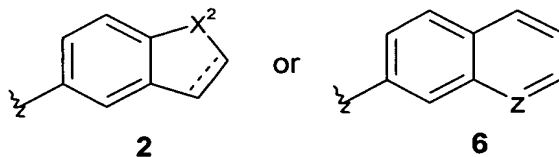
(+/-)-Cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide;

6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3S)-(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone; pharmaceutically acceptable salts of said compounds; and solvates of said compounds; ~~and prodrugs of said compounds.~~

Claims 15-28. (Canceled)

29. (Previously presented) A compound of claim 1, wherein R<sup>1</sup> is H; R<sup>2</sup> is



X<sup>2</sup> is -N(R<sup>6</sup>)-, the dashed line in formula 2 represents an optional double bond, Z is CH or N and the above R<sup>2</sup> group of formulas 2 and 6 are optionally substituted by 1 to 5 R<sup>5</sup>.

Claims 30-33. (Canceled)

34. (Previously presented) The compound of claim 29, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5-C_9$  azabicyclic, aziridinyl, azetidiny, or pyrrolidinyl ring wherein said  $C_5-C_9$  azabicyclic, aziridinyl, azetidiny, or pyrrolidinyl ring is optionally substituted by 1 to 5  $R^5$  substituents.

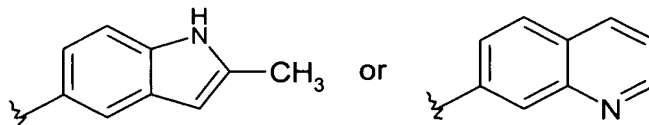
35. (Original) The compound of claim 34, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5-C_9$  azabicyclic, azetidiny or pyrrolidinyl ring wherein said  $C_5-C_9$  azabicyclic, azetidiny or pyrrolidinyl ring is optionally substituted by 1 to 5  $R^5$  substituents.

36. (Original) The compound of claim 35, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5-C_9$  azabicyclic ring wherein said  $C_5-C_9$  azabicyclic ring is optionally substituted by 1 to 5  $R^5$  substituents.

37. (Original) The compound of claim 36, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form an azetidiny ring wherein said azetidiny ring is optionally substituted by 1 to 5  $R^5$  substituents.

38. (Original) The compound of claim 37, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a pyrrolidinyl ring wherein said pyrrolidinyl ring is optionally substituted by 1 to 5  $R^5$  substituents.

39. (Previously presented) A compound of claim 1, wherein  $R^1$  is H;  $R^2$  is



Claims 40-43. (Canceled)

44. (Previously presented) The compound of claim 39, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5$ - $C_9$  azabicyclic, aziridinyl, azetidiny, or pyrrolidinyl ring wherein said  $C_5$ - $C_9$  azabicyclic, aziridinyl, azetidiny, and pyrrolidinyl ring are optionally substituted by 1 to 5  $R^5$  substituents.

45. (Original) The compound of claim 44, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5$ - $C_9$  azabicyclic, azetidiny or pyrrolidinyl ring wherein said  $C_5$ - $C_9$  azabicyclic, azetidiny or pyrrolidinyl ring are optionally substituted by 1 to 5  $R^5$  substituents.

46. (Original) The compound of claim 45, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a  $C_5$ - $C_9$  azabicyclic ring, wherein said  $C_5$ - $C_9$  azabicyclic ring is optionally substituted by 1 to 5  $R^5$  substituents.

47. (Original) The compound of claim 46, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form an azetidiny ring, wherein said azetidiny ring is optionally substituted by 1 to 5  $R^5$  substituents.

48. (Original) The compound of claim 47, wherein  $R^{11}$  is  $-C(O)NR^{12}R^{13}$  wherein  $R^{12}$  and  $R^{13}$  taken together with the nitrogen to which they are attached form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5  $R^5$  substituents.

49. (Original) A pharmaceutical composition for the treatment of a hyperproliferative disorder in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

Claims 50-58. (Canceled)

59. (Original) A method of treating a hyperproliferative disorder in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

60. (Original) The method of claim 59 wherein said hyperproliferative disorder is cancer.

61. (Original) The method of claim 60 wherein said cancer is brain, lung, squamous cell, renal, kidney, ovarian, bladder, gastric, pancreatic, breast, head, neck, oesophageal, prostate, colorectal, gynecological or thyroid cancer.

62. (Original) The method of claim 60 wherein said hyperproliferative disorder is noncancerous.

63. (Original) The method of claim 62 wherein said disorder is a benign hyperplasia of the skin or prostate.

64. (Original) A method for the treatment of a hyperproliferative disorder in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1 in combination with an anti-tumor agent selected from the group consisting of mitotic inhibitors, alkylating agents, anti-metabolites, intercalating antibiotics, growth factor inhibitors, cell cycle inhibitors, enzymes, topoisomerase inhibitors, biological response modifiers, anti-hormones, and anti-androgens.

65. (Original) A method of treating pancreatitis or kidney disease in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

66. (Original) A method of preventing blastocyte implantation in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

67. (Original) A method for treating a disease related to vasculogenesis or angiogenesis in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

68. (Original) The method of claim 67, wherein said disease is selected from the group consisting of tumor angiogenesis, chronic inflammatory disease such as rheumatoid arthritis, atherosclerosis, skin diseases such as psoriasis, excema, and scleroderma, diabetes, diabetic retinopathy, retinopathy of prematurity, age-related macular degeneration, hemangioma, glioma, melanoma, Kaposi's sarcoma and ovarian, breast, lung, pancreatic, prostate, colon and epidermoid cancer.